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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/836,096	04/17/2001	Philippe Gatepin	PHFR 000041 7718		
24737	7590 02/25/2005		EXAMINER		
	TELLECTUAL PROP	CZEKAJ,	CZEKAJ, DAVID J		
P.O. BOX 300 BRIARCLIFF) MANOR, NY 10510		ART UNIT	PAPER NUMBER	
	,		2613		

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	No.	Applicant(s)				
Office Action Summary		09/836,096		GATEPIN, PHILIPPE				
		Examiner		Art Unit				
		Dave Czekaj	<u> </u>	2613				
 Period for	The MAILING DATE of this communication Reply	on appears on the co	over sheet with the c	orrespondence ad	Idress			
THE MA - Extension after SU - If the pe - If NO pe - Failure Any rep	RTENED STATUTORY PERIOD FOR F AILING DATE OF THIS COMMUNICAT ons of time may be available under the provisions of 37 (x (6) MONTHS from the mailing date of this communication priod for reply specified above is less than thirty (30) days the foliation of the provision of the state of the state of the to reply within the set or extended period for reply will, by the preceived by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	ION. CFR 1.136(a). In no event, ion. s, a reply within the statutory period will apply and will exy statute, cause the applicat	however, may a reply be tim y minimum of thirty (30) days pire SIX (6) MONTHS from ion to become ABANDONEI	nely filed s will be considered timel the mailing date of this c O (35 U.S.C. § 133).				
Status								
1)⊠ R	esponsive to communication(s) filed on	13 October 2004.						
2a)⊠ T	his action is FINAL . 2b)	This action is non-	-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositio	n of Claims							
4a 5)□ C 6)⊠ C 7)□ C	Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 1-6 is/are rejected. Claim(s) is/are objected to.							
Application	n Papers							
9)[] Tr	ne specification is objected to by the Ex	aminer.						
10)⊠ Tł	10)⊠ The drawing(s) filed on <u>17 April 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
	pplicant may not request that any objection	•, ,	•	7 7				
	eplacement drawing sheet(s) including the one oath or declaration is objected to by the oath or declaration is objected to be obj							
Priority un	der 35 U.S.C. § 119							
a) ⊠ 1 2 3	cknowledgment is made of a claim for for All b) Some * c) None of: Certified copies of the priority docu Copies of the certified copies of the application from the International Ee the attached detailed Office action for	uments have been ruments have been ruments have been ruments Bureau (PCT Rule 1	eceived. eceived in Applications have been receivee 7.2(a)).	on No ed in this National	Stage			
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Attachment(s								
1) Notice of	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-94	4)	Interview Summary Paper No(s)/Mail Da					
3) 🔲 Informa	tion Disclosure Statement(s) (PTO-1449 or PTO/ lo(s)/Mail Date	SB/08) . 5)	Notice of Informal P		D-152)			

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-6 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (6167084), (hereinafter referred to as "Wang") in view of Wells et al. (6310915), (hereinafter referred to as "Wells").

Regarding claims 1 and 4, Wang discloses an apparatus that allocates bits in a statistical multiplexing system. This apparatus comprises "a regulation process that uses quantization scales and the input signal to obtain the output rate" (Wang: figure 4, wherein the regulation process is performed by the encoder and decoder), "computing an indicator of a compressed data quality for the respective transcoding channels, the indicator being computed from the input compressed data signal" (Wang: figure 6, column 11-column 12, wherein the indicator is the complexity measure shown in equations 5 and 7-8, the compressed input signal is the compressed program) and "allocating the output bit rate to the transcoding channel from a total output bit rate, indicator, and a

sum of the indicators" (Wang: figure 6, column 8, lines 54-67- column 9, lines 1-25, wherein the output bit rate is the target number of bits, the sum of the indicators is the complexities of each frame). Although Wang shows calculating an indicator, Wang fails to show computing the indicator independent of the regulation process as claimed. Wells teaches that computing an indicator independent of a regulation process maintains the overall quality of video (Wells: column 4, lines 60-67 – column 5, lines 1-30, wherein the indicator is the complexity, figure 2, wherein the regulation process is performed by the encoder and decoder units). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Wang and add the indicator computation taught by Wells in order to obtain an apparatus that transmits better overall quality of video. One would be further motivated since Wang is silent on when (before or after the regulation process) the indicator is computed.

Regarding claim 2, Wang discloses "the indicator is computed from an average of a function of average quantization scale and a number of bits used to encode the picture" (Wang: columns 11-12, wherein the average quantization scale is $Q_{l,n,t}$, the number of bits used for the picture is $R_{l,n,t}$).

Regarding claim 3, Wang discloses "the indicator is computed from a weighted average of a set of averages calculated over the pictures" (Wang: columns 11-12, wherein the averages is the quantization scale, the weight is the weighting factor K).

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Regarding claims 5 and 6, note the examiners rejection for claim 1, and in addition Wang discloses "a set of transcoders for converting input compressed data at an input bit rate into output signals encoded at an output bit rate" (Wang: figures 3 and 6, wherein the transcoders convert the input bit rate into an output bit rate), "computing an indicator of a compressed data quality for the respective transcoding channels, the indicator being computed from the input compressed data signal" (Wang: figure 6, column 11-column 12, wherein the indicator is the complexity measure shown in equations 5 and 7-8, the compressed input signal is the compressed program), "allocating the output bit rate to the transcoding channel from a total output bit rate, indicator, and a sum of the indicators" (Wang: figure 6, column 8, lines 54-67- column 9, lines 1-25, wherein the output bit rate is the target number of bits, the sum of the indicators is the complexities of each frame), and a "multiplexer for providing a multiplexed signal at the output bit rate by multiplexing the output signals" (Wang: figure 6, item 660).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (703) 305-3418. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600